

**IN THE UNITED STATES DISTRICT COURT FOR THE
WESTERN DISTRICT OF OKLAHOMA**

In re: General Motors Corporation,)	Case No. MDL 04-1600
"Piston Slap" Products Liability Litigation,)	Judge Joe Heaton
)	
)	
)	(This document relates to
)	all cases seeking class certifications)

ORDER

This federal multi-district litigation (MDL) proceeding presently includes eight cases transferred by the MDL panel, plus one case initially brought in Oklahoma and removed to this Court.¹ The complaints or amended complaints in the MDL actions assert various claims or theories of recovery, based on state law, but all proceed from the same factual premise: plaintiffs maintain the vehicles they own, that were manufactured by defendant General Motors Corporation ("GM"), are powered by defectively designed and manufactured engines. They claim their vehicles have "piston slap," a defect that allegedly results from excessive clearance between the pistons and the sides of the cylinder walls or bores.

Class certification motions have been filed in seven cases.² In six of the cases the

¹ *The non-Oklahoma cases were originally filed in Florida, Kansas, Massachusetts, Michigan, Missouri, New Jersey, New York, Pennsylvania, and Texas. Two cases transferred by the MDL panel were remanded to state courts in Florida and Georgia and two others that originated in California and Texas have been dismissed.*

² *The class definitions for the proposed state classes are identical, with the exception of the states of residency of the putative class members.*

plaintiffs have moved to certify state-wide classes.³ The plaintiffs in the remaining case⁴ seek certification of a nationwide class, defined similarly to the proposed state classes.⁵ GM objects to class certification, contending that the plaintiffs fail to meet the requirements of Rule 23. The court concurs, finding the plaintiffs have neither shown that identifiable classes exist or that the predominance and superiority requirements of Rule 23(b)(3) have been satisfied.

BACKGROUND

The named plaintiffs all purchased vehicles with certain engines that GM designed and manufactured for some of its 1999-2003 model year vehicles. They contend the engines were defective and allege the defect – piston slap – causes a loud knocking noise when the vehicles are first started. They also claim it damages the engine, wastes fuel and oil, causes significantly higher vehicle emissions, reduces the vehicle's power and performance, and lowers the vehicle's resale value. The plaintiffs assert that while GM knew about the problem, the company decided to modify its definition of normal engine noise and increase the vehicles' accepted oil consumption rate rather than fix it. Several Technical Service

³ *Motions to certify have not been filed in Haehn v. General Motors Corporation, No. 05-0287-HE (W.D. Okla.) (originating in Kansas) or Pearson v. General Motors Corporation, No. 05-1504-HE (W.D. Okla.) (filed in Oklahoma on behalf of New Jersey residents), although both complaints contain class action allegations.*

⁴ *Boyd v. General Motors Corporation*, No. 04-0755-HE (W.D. Okla.).

⁵ *Excluded from the proposed classes are federal judges and magistrates and their immediate families, GM and any company related or controlled by GM, and GM officers, directors and employees and their immediate families.*

Bulletins GM issued in 2001 and 2003 demonstrate, the plaintiffs allege, GM's awareness of piston slap and its attempt to avoid liability and conceal the negligent design or manufacturing defect. Some plaintiffs sought, without success, to have the alleged defect corrected under GM's new vehicle limited warranty. They claim they were told that the loud knocking sound was normal engine noise.

As a result of their complaints to GM customer service and negotiations conducted on their behalf by the Better Business Bureau Autoline, certain plaintiffs eventually received a 6 year/100,000 mile extended warranty on their vehicle engines and engine parts. GM then allegedly refused to cover piston slap under the new warranty. While the plaintiffs' claims vary somewhat, collectively they allege breach of express and implied warranties, violation of state consumer laws and seek damages, injunctive and/or declaratory relief.

STANDARD

Certain general principles govern the court's disposition of the pending class certification motions.⁶ A party seeking to certify a class bears the burden of proving that the requirements of Fed.R.Civ.P. 23 are met. Reed v. Bowen, 849 F.2d 1307, 1309 (10th Cir. 1988). Despite this normal allocation of the burden of proof, the court "must engage in its own 'rigorous analysis' of whether 'the prerequisites of Rule 23(a) have been satisfied.'" Shook v. El Paso County, 386 F.3d 963, 968 (10th Cir. 2004) (quoting Gen. Tel. Co. of the

⁶ *Although this proceeding involves multiple cases transferred to this Court under the MDL procedure, in analyzing questions of federal law a transferee court applies the law of the circuit in which it is located. In re Temporomandibular Joint (TMJ) Implants Products Liab. Litig.*, 97 F.3d 1050, 1055 (8th Cir. 1996).

S.W. v. Falcon, 457 U.S. 147, 161 (1982)), *cert. denied*, ___ U.S. ___ (2005). During the process, the substantive allegations of the complaint are accepted as true; the merits of the plaintiffs' claims are not considered. *Id. Accord J.B. v. Valdez*, 186 F.3d 1280, 1290 n.7 (10th Cir. 1999) (while court must take the factual allegations of the complaint as true when resolving a certification motion, it need not accept conclusory allegations which merely "parrot" the requirements of Rule 23). See Eisen v. Carlisle & Jacquelin, 417 U.S. 156, 178 (1974) ("[N]othing in either the language or history of Rule 23 ... gives a court any authority to conduct a preliminary inquiry into the merits of a suit in order to determine whether it may be maintained as a class action."). However, the nature of the claims or defenses to be resolved may be considered as they bear on the various certification issues to be resolved. Joseph v. Gen. Motors Corp., 109 F.R.D. 635, 637-38 (D. Colo. 1986). Because a class certification decision is subject to later modification if circumstances warrant, a court should err in favor of, and not against, the maintenance of a class action. Esplin v. Hirschi, 402 F.2d 94, 99 (10th Cir. 1968). In each case the plaintiffs seek to certify a class pursuant to Fed.R.Civ.P. 23(a) and (b)(3).

Class Identification

A threshold determination in every case is whether an identifiable class exists.⁷ It is

⁷ Some courts refer to this requirement as a prerequisite or an "implicit condition" to Rule 23. *In re A. H. Robins Co., Inc.*, 880 F.2d 709, 728 (4th Cir. 1989) ("Though not specified in the Rule, establishment of a class action implicitly requires both that there be an identifiable class and that the plaintiff or plaintiffs be a member of such class."). See Mendoza v. Zirkle Fruit Co., 222 F.R.D. 439 (E.D.Wash. 2004); Nicodemus v. Union Pacific Corp., 204 F.R.D. 479 (D.Wyo. 2001); Stambaugh v. Kansas Dep't of Corrections, 151 F.R.D. 664, 671 (D.Kan. 1993). Others treat the

not necessary that every member of the class be identified at the outset. If the general outlines of the class are determinable at the beginning of the litigation, that will ordinarily suffice. “However, the requirement that there be a class will not be deemed satisfied unless the class description is sufficiently definite so that it is administratively feasible for the court to determine whether a particular individual is a member.” 7A Charles Alan Wright, Arthur R. Miller & Mary Kay Kane, *Federal Practice and Procedure* §1760 at 139-40 (3d ed. 2005). In the circumstances presented by these cases, the court concludes it is not administratively feasible to determine the identity of the members of the subject classes and that this deficiency requires denial of the class certification motions.

In all the pending cases, the proposed class definition is essentially the same.

All [subject jurisdiction] residents who purchased within [the subject jurisdiction] and who own any 1999 through 2003 model year General Motors Corporation vehicle equipped with a Subject Engine that experiences Piston Slap.

For purposes of this class definition, Subject Engine shall mean a 4.8, 5.3, or 6.0 liter Generation III V8 engine⁸ designed and manufactured by General Motors Corporation. For purposes of this class definition, Piston Slap shall mean secondary (*i.e.*, lateral) piston motion due in whole or in part to excessive piston-to-bore clearance, which results in the piston impacting the cylinder liner at regular intervals.

Broadly stated, the proposed class is current owners (as opposed to original

issue as an element of the “numerosity” determination required under Fed.R.Civ.P. 23(a). Joseph v. Gen. Motors Corp., 109 F.R.D. at 638-39. The same issue impacts the determination of “manageability” required under Rule 23(b).

⁸ *These engines are referred to as GM’s “Gen III” engines.*

purchasers) of vehicles with a Subject Engine which actually has “piston slap.”⁹ The focus on current owners, as opposed to original purchasers, has consequences for the Court’s resolution of other issues.¹⁰ However, as to the question of class identification, it suffices to say that the proposed definition complicates the process but does not present an insurmountable hurdle. It will be far more difficult to identify and to notify those persons who are current owners of vehicles with the indicated model year and Gen III engines, because the sales records of defendant will not reflect subsequent sales and there may well be no ready means of locating current owners.¹¹ On the assumption that problems of notice can be resolved by supplementing other means of notice with publication, the Court merely notes the complicating factor.

The more important and determinative issue consists of the difficulty of identifying the persons who have the subject vehicles with engines that actually have “piston slap.” Plaintiffs concede that all Gen III engines do not have piston slap as they define it. Plaintiffs rely on internal GM documents which indicate GM estimated 5% to 10% of the Gen III

⁹ As originally proposed in the various class action complaints, the putative classes were defined to include all purchasers, from a GM dealer, of vehicles in the indicated model years with a 3.1, 3.4, 4.8, 5.3, 5.7 (LSI), 6.0 or 8.1 liter engine. E.g., *Skinner v. General Motors Corporation*, No. 04-0740-HE (W.D. Okla.), First Amended Class Action Complaint, ¶46. There were other differences as well. The class certification motions have since refined the proposed class definition to that described above.

¹⁰ See discussion pertaining to Rule 23(b)(3) predominance factor *infra* p. 25.

¹¹ Plaintiffs initially suggested identifying potential class members through GM’s sales or service records, plus persons who have accessed the piston slap website maintained by one of the plaintiffs. That approach is considerably less feasible with a class of current owners, rather than initial purchasers.

engines had some sort of piston noise problem.¹² Plaintiffs suggested at the certification hearing that as many as 20% of the subject engines may have “piston slap.” [Transcript, p. 14.] Whether the incidence of piston slap is 5% or 20% is not important for purposes of class identification. What is important is the fact that a substantial majority (in the area of 80% or more) of the Gen III engines concededly do not have “piston slap.” The question therefore becomes whether there is some reliable, practical means of identifying those engines which do (and their owners).

The usual means of determining whether a particular engine has a defect of the sort alleged to exist here involves individual examination of the engine. The parties’ submissions indicate that a trained engineer or mechanic may, in some cases, be able to identify piston slap by listening to the motor. Certain piston problems can be identified through use of accelerometers, dynamometers, or other tools. In some cases, a complete tear down of the engine might be necessary to make a definitive determination. All these techniques, however, commonly require a substantial degree of individualized inquiry and analysis for each motor examined. It simply is not practical in this case to employ these methods to sort through the hundreds of thousands of vehicles potentially impacted by “piston slap” just to clear the initial threshold of identifying the class.

Plaintiffs argue they can provide a practical means of identifying class members. They propose a testing method developed by Dr. Robert Hoekstra, a scientist and engineer

¹² *GM disputes that the problems referenced in their documents are in fact “piston slap,” but it is unnecessary to resolve that dispute here.*

with substantial experience in the design and analysis of internal combustion engines. Dr. Hoekstra's method involves the use of wavelet theory and digital signal processing algorithms to identify the wave forms generated by the repetitive impact of pistons against the cylinder walls of an engine. By analyzing this data with various computer programs, the Hoekstra method generates a sort of "acoustic signature" for piston activity, expressed as a Zeta parameter. Dr. Hoekstra maintains that the existence or non-existence of piston slap in a particular engine can be determined when, after necessary adjustments, an engine is determined to have a Zeta parameter in excess of 4.3.

Hoekstra proposes a testing protocol to obtain the necessary data from the owners of each engine. The protocol, which presumably would be supplied to each vehicle owner through a notice procedure, contemplates the following: (a) tests are performed with the vehicle in park and the parking brake applied, (b) the vehicle must be parked on a quiet, flat driveway, (c) the vehicle must not have been started for a minimum of eight hours before the test, (d) a designated toll-free number is called on a cordless telephone, and the caller's name, address and VIN number is provided or, alternatively, a tape recorder is used with the same information, plus the date and time of the test, recorded on the tape, (e) the phone or tape recorder is placed within six (6) inches of the right front wheel well, (f) the vehicle is started and allowed to idle for approximately one minute, (g) after the idle period, the gas pedal should be tapped to bring the engine to approximately 3000 rpm's, and immediately returned

to idle,¹³ (h) step g is then repeated three times in quick succession, and (i) after allowing the vehicle to idle for approximately 20 seconds, the engine is then turned off. The phone call is then ended or the recorded tape is sent in to a designated address.¹⁴ The information would then be analyzed by computer, using the programs identified or developed by Dr. Hoekstra.

The scientific underpinnings of Dr. Hoekstra's theory and method are well beyond the capacity of this court to analyze or evaluate to any significant degree.¹⁵ From the submissions of the parties, the court is generally satisfied that the science behind the use of acoustic signatures is reliable and that, as plaintiffs suggest, it may be the wave of the future in identifying and analyzing engine problems. That does not, however, necessarily lead to the conclusion that wavelet theory and/or Dr. Hoekstra's protocol provide a practical and workable means of sorting out class membership questions here. The issue in these cases does not ultimately turn on whether the underlying science of wavelet theory or acoustic

¹³ With respect to this element, Dr. Hoekstra states: "This is a tap of the gas pedal. Do not accelerate the engine slowly. Be cautious when tapping the gas so that you do not over-rev the engine." Hoekstra affidavit, Ex. 22, para. 5(g), plaintiffs' combined appendix.

¹⁴ Hoekstra affidavit, Ex. 22, para. 5, plaintiffs' combined appendix.

¹⁵ For example, Dr. Hoekstra explains that "Zeta" is "a non-dimensional number because it is a ratio that is a measure of the fractal nature of the signal. And it's – as I said, the hers parameter – from the hers parameter you can calculate Alpha. From Alpha you can calculate Zeta, and so it's founded on the idea of the hers parameter, which is well-known in chaos theory." He goes on to explain that the Zeta parameter is "the ratio of the convoluted energy against the scale on a log basis." Hoekstra deposition, pp. 126-27. (It appears the reference should be to the "HERS" parameter.)

signatures is correct or whether its complexities are understandable to a court.¹⁶ Rather, the question is whether, in the context of these cases, plaintiffs have offered a pragmatic, feasible means of identifying class members. For a number of reasons, the court concludes they have not.

First, as plaintiffs concede, using wavelet theory to resolve the specific issues presented in the MDL cases is very much “cutting edge.” No evidence has been presented that Dr. Hoekstra’s theories or method have actually been used by others to measure piston to bore clearance in motors.¹⁷ His specific method has not been subjected to any sort of peer review, and no one has any experience with the protocol he proposes as a means of identifying particular engine characteristics.

Second, it is less than clear that the proposed method actually measures the alleged defect in the engines. The method is offered as a reliable means of identifying those engines which have excessive piston to bore clearance, but Dr. Hoekstra concedes that he has not torn down any engines to actually assess the relationship between particular Zeta parameters and

¹⁶ *There are many technologies, upon which we are not hesitant to rely, which are not understandable to persons without specialized backgrounds and training. Indeed, if light bulbs, televisions, and digital phones depended for their functioning on the ability of a judge — or at least this judge — to explain their scientific underpinnings, the world would be a very dark and quiet place.*

¹⁷ *Plaintiffs’ counsel argued that Chrysler had employed this technology in some fashion, but presented no evidence in that regard. There is some indication that a company named Signition conducted research in this area, but no evidence of any useable technology or method emerging.*

piston to bore clearance.¹⁸

Third, perhaps of most concern is the practicality of determining class membership on the basis of information generated by hundreds of thousands of untrained, non-mechanic vehicle owners.¹⁹ Dr. Hoekstra's protocol requires, for reasons presumably related to the accuracy of the results, that the testing be done on a flat surface, in a quiet setting, after the engine/vehicle has not been started for at least eight hours. The motor must be "revved up" to a particular level and that must occur and be repeated in a particular sequence. It requires little imagination to contemplate the hundreds or thousands of possible variations in phone placement, background noise, "revving" techniques, and the like, which untrained vehicle owners might generate.²⁰ Plaintiffs' assurance that Dr. Hoekstra has developed, or can

¹⁸ The discussion of whether he had torn down motors arose in the context of whether a particular Zeta parameter indicated damage to an engine, which is not necessarily the same thing as whether that engine has excessive piston to bore clearance. However, the point is that there has been no tear down of motors to evaluate whether Dr. Hoekstra's method actually measures what it is claimed to measure.

¹⁹ The number of persons seeking to make claims via use of the protocol would undoubtedly be substantial, but the concerns of both parties in this regard appear unrealistic. GM suggests every person with a Gen III engine (approximately 6 million) would call in, requiring years to complete the class determination process. Given the approximations of the incidence of the alleged defect, not to mention the difficulties of actually notifying those who may have experienced "piston slap," such projections are plainly overblown. Just as unrealistically, plaintiffs and Dr. Hoekstra seem to assume that persons calling in would do so at convenient ten minute intervals so as not to overwhelm the available phone lines. Neither position seems grounded in reality. In any event, the court concludes the number of engines potentially being screened by the protocol, while substantial, is not a determining factor.

²⁰ No doubt some deviations from the protocol, such as testing a hot engine rather than leaving it unstarted for eight hours, might cut in favor of defendant. However, the court is unpersuaded that the impact of all possible deviations can be reliably predicted.

develop, software programs to identify or correct such variations is too speculative to be relied on in this context.

Dr. Hoekstra has acknowledged that “anomalies” may occur in the data generated as to a particular vehicle, requiring further analysis and adjustment to determine if the engine actually has piston slap. The presentations at the certification hearing highlighted instances where particular engines with a Zeta parameter of less than 4.3 were ultimately determined by Dr. Hoekstra to have piston slap. In other cases, engines with a Zeta parameter in excess of 4.3 were determined not to have piston slap. In post-hearing submissions, Dr. Hoekstra suggests some of these results are due to GM having selected certain graphs, but not others, to make its point about particular engines. That explanation raises as many questions as it answers.²¹

Plaintiffs also suggest that Dr. Hoekstra has developed new algorithms or programs which can identify and adjust for the anomalies in the Zeta graphs and data. That may be, but it strikes the court as far too speculative to assume that can be done. As noted above, the application of wavelet theory to the determination involved here is itself “cutting edge.” The court is unwilling to simply assume that Dr. Hoekstra can develop a program to identify

²¹ Hoekstra affidavit, filed February 2, 2006, para. 5. In addressing the circumstances of “Wisconsin Truck #1,” which GM argued had a Zeta parameter below 4.3 but was asserted to have piston slap, Dr. Hoekstra indicates the problem was because GM relied on the Zeta graph labeled “Wisconsin Truck #1R” rather than the one labeled “Wisconsin Truck #1L.” If the identification of piston slap in a particular engine actually turns on whether one looks to the data generated from recordings near the left wheel, rather than the right wheel, it is difficult to have much confidence in the data generated by hundreds of thousands of untrained persons in uncontrolled conditions.

and correct any problems or anomalies which may occur in the course of implementing this untested (in this context) theory and protocol.

Finally, there clearly are significant differences between determining the existence of piston slap by the Hoekstra method versus making that determination by conventional analytic techniques. The reliance on a Zeta parameter of 4.3 or higher was designed to identify piston noise that would be audible to a trained ear, yet defendant points to conflicting assessments by trained personnel in some cases. This disagreement does not mean that the Hoekstra method is necessarily wrong or that alternative means of assessing piston slap are necessarily right. It does, however, suggest there are substantial questions about whether the Hoekstra method reliably identifies piston slap so as to warrant relying on it to determine who is, or is not, a member of the proposed classes.

Since the Hoekstra method does not provide a practical and reliable shortcut for ascertaining class membership, the only way class members can be identified is by more involved, individualized factual determinations. Those determinations would, of necessity, be in the nature of mini-trials. Class certification in such circumstances is not appropriate. Mike v. Safeco Ins. Co. of America, 223 F.R.D. 50, 53 (D. Conn. 2004) (“The proposed class is untenable because the court would have to conduct an individual inquiry regarding the merits of each proposed plaintiff’s claim in order to determine class membership.”); Sanneman v. Chrysler Corp., 191 F.R.D. 441, 446 (E.D. Pa. 2000) (“Determining a membership in the class would essentially require a mini-hearing on the merits of each class

member's case, which in itself renders a class action inappropriate for addressing the claims at issue."); Luedke v. Delta Airlines, Inc., 155 B.R. 327, 332 (S.D.N.Y. 1993) (certification denied because it would result in "an 'unmanageable number' of individualized, somewhat subjective determinations" to decide membership).

Plaintiffs have suggested that the class identification problems can be avoided by certifying the class and then having a post-certification claims procedure to determine who actually has an engine with piston slap. They suggest a procedure similar to that used in Allapattah Servs., Inc. v. Exxon Corp., 333 F.3d 1248 (11th Cir. 2003), *aff'd on other ground*, ___ U.S. ___ (2005). Allapattah involved claims by Exxon's wholesale dealers that Exxon had secretly overcharged them on gasoline sales. The court established a procedure whereby, after a trial by representative parties, class members could establish their particular claims and resolve issues unique to them. These included deciding whether a particular dealer actually was an Exxon dealer during the relevant time period, the amount of the dealer's compensatory damages, and whether defenses such as the statute of limitations or setoff rights impacted a particular claim.

The Court is not persuaded that the circumstances in Allapattah parallel those existing here. The Allapattah claims process involved making some relatively straightforward and simple determinations, such as whether a particular dealer was an Exxon dealer at the relevant time. That finding would be somewhat akin to determining, in this case, whether

a particular person is the owner of a vehicle with a “subject engine.”²² Consulting written records would allow verification of a claimant’s status in Allapattah. Here, though, the inquiry is much more involved. Unlike the situation in Allapattah, where there appears to have been no question but that Exxon employed the same pricing techniques with all its dealers, all owners of “subject engines” are not similarly situated. Some have engines with the alleged defect and others do not. The alleged defect is apparently randomly distributed across millions of vehicles (or, as to the various state classes, tens or hundreds of thousands of vehicles). As the foregoing discussion of the Hoekstra method suggests, identifying vehicles which actually have the defect or exhibit symptoms of piston slap would necessarily require far more complex, individualized determinations than a simple claims procedure could practically accomplish. Given the nature of the determination required to be made here, it would not solve the problem to simply shift the factual determinations until later in the process.

For these reasons, the court concludes plaintiffs have not proposed classes which are susceptible of reasonable determination and the various motions for certification must be denied on that basis. The same conclusion – that class certifications are inappropriate – is reached when the class identification problem, rather than being considered as a threshold issue, is considered under the traditional Rule 23 class certification analysis. See Bynum v.

²² “[S]omewhat akin” but not exactly the same. Given that the proposed classes involve current owners rather than original purchasers, GM’s records (as opposed to other forms of documentary proof) will not supply the answers to ownership questions in the same way that Exxon’s records would identify its dealers.

District of Columbia, 217 F.R.D. 43, 49-50 (D.D.C. 2003) (difficulties in identifying putative class members pertinent to issue of class manageability under Rule 23(b)(3) superiority factor).²³ See generally Shook, 386 F.3d at 972 (lack of identifiability is a factor that may defeat Rule 23(b)(3) class certification).

Rule 23

Class certification is appropriate if the four threshold requirements of Rule 23(a) – numerosity (a class sufficiently large that joinder of all members is impracticable), commonality (questions of law or fact common to the class), typicality (named parties’ claims or defenses are typical of the class) and adequacy of representation (representatives will fairly and adequately protect the interests of the class) – are established and at least one of the requirements of Rule 23(b) is met. Shook, 386 F.3d at 971. See Amchem Prods. v. Windsor, 521 U.S. 591, 613-14 (1997).²⁴ Here the plaintiffs seek to certify the class under Rule 23(b)(3), which requires that “questions of law or fact common to the members of the class predominate over any questions affecting only individual members, and that a class action is superior to other available methods for the fair and efficient adjudication of the

²³ As the parties have indicated an appeal of the certification decision is likely, the court has proceeded to analyze the Rule 23 factors in the event an appeal is permitted and the consideration of alternate grounds for the court’s decision becomes appropriate. See Fed.R.Civ.P. 23(f). The problems inherent in determining who belong in the class principally impact the Rule 23(b)(3) predominance and superiority factors.

²⁴ Although class certification was sought for settlement purposes only in Amchem, the Court held that Rule 23’s requirements, with the exception of Rule 23(b)(3)(D), still had to be satisfied. Amchem, 521 U.S. at 619-22.

controversy.” Rule 23(b)(3); Amchem, 521 U.S. at 615. “Granting or denying class certification is a highly fact-intensive matter of practicality.” Monreal v. Potter, 367 F.3d 1224, 1238 (10th Cir. 2004). “Each case must be decided on its own facts, on the basis of ‘practicalities and prudential considerations.’” Reed, 849 F.2d at 1309 (quoting United States Parole Comm’n v. Geraghty, 445 U.S. 388, 406 n.11(1980)).

Rule 23(a) Factors

Numerosity

Rule 23(a) merely requires that “the class is so numerous that joinder of all members is impracticable.” GM does not contest the numerosity requirement and, using GM’s estimate that 5 to 10% of the Gen III engines have some sort of piston noise problem, the number of potential class members easily satisfies Rule 23(a)(1). *See Samuel-Bassett v. Kia Motors America, Inc.*, 212 F.R.D. 271, 277 (E.D.Pa. 2002) (noting Third Circuit’s holding that if the “named plaintiff demonstrates that the potential number of plaintiffs exceeds 40, the first prong of Rule 23(a) has been met.”), *vacated on other grounds*, 357 F.3d 392 (3d Cir. 2004).

Commonality and Typicality

“The commonality and typicality requirements of Rule 23(a) tend to merge.”²⁵ Both serve as guideposts for determining whether, under the particular circumstances, maintenance

²⁵ *The commonality and typicality requirements also tend to merge with the adequacy-of-representation requirement, although the latter requirement also raises concerns about conflicts of interest and the competency of class counsel. Falcon*, 457 U.S. at 158 n.13.

of a class action is economical and whether the named plaintiff's claim and the class claims are so interrelated that the interests of the class members will be fairly and adequately protected in their absence." Falcon, 457 U.S. at 158 n.13. "Commonality requires only a single issue common to the class." Valdez, 186 F.3d at 1288 (internal quotation omitted). See Realmon v. Reeves, 169 F.3d 1280, 1285 (10th Cir. 1999) ("Commonality is not necessary on every issue raised in a class action."). Common questions of law or fact also will fulfill the typicality requirement. Milonas v. Williams, 691 F.2d 931, 938 (10th Cir. 1982). Class members' differing fact situations do not defeat typicality under Rule 23(a)(3) as long as the claims of the class representatives and class members are based on the same legal or remedial theory. Adamson v. Bowen, 855 F.2d 668, 676 (10th Cir. 1988). See Penn v. San Juan Hospital, Inc., 528 F.2d 1181, 1189 (10th Cir. 1975) (typicality requirement is usually not argued -- one commentator suggesting that the typicality requirement is superfluous as it merely duplicates the requirements of other provisions of Rule 23, another view being that it "dovetails with the adequacy of representation of 23(a)(4)").

A problem exists as to at least one named plaintiff, Troy Smith, whose engine, when tested under the Hoekstra protocol, was found not to have "piston slap." Another class representative, Douglas Brown, does not own a vehicle equipped with a "Subject Engine." "By definition, class representatives who do not have Article III standing to pursue the class claims fail to meet the typicality requirements of Rule 23." Rector v. City & County of Denver, 348 F.3d 935, 950 (10th Cir. 2003). Accord Milonas, 691 F.2d at 937 ("It is

axiomatic that an uninjured plaintiff cannot bring suit on behalf of an injured class.”). This failure would mandate that the affected classes be denied certification, unless the deficiency could be corrected.²⁶ However, because other grounds exist for denying class certifications, the court need not determine whether, as plaintiffs suggest, the typicality problem can be cured simply by substituting a new class representative.

As for the remaining proposed classes, the court concludes they each share several issues, including whether piston slap is an engine defect and whether the claimed defect constitutes a breach of express or implied warranty. *See Samuel-Bassett*, 212 F.R.D. at 277-78 (common questions included whether defendant’s automobiles possessed the alleged brake defect and whether the defect constituted a breach of express warranty and the implied warranty of merchantability). As to them, the court finds both the commonality and typicality requirements are met.²⁷ *See id.* at 278 (“‘typicality’ requirement is intended to safeguard

²⁶ *This is not a situation where the class representative’s claim became moot. See e.g. Adamson*, 855 F.2d at 676 (“Final resolution of named plaintiff Adamson’s claims for social security benefits and attorney’s fees may render his claims no longer typical of those of the class, but it does not require the class claims to be dismissed. If the district court considers Adamson no longer an adequate class representative under Rule 23(a)(4), it should consider intervention by other members of the proposed class or the addition of a named plaintiff who would satisfy the requirements of typicality and adequacy of representation.”); *Milonas*, 691 F.2d at 937 (“It is well settled, however, that a named plaintiff may continue to represent a class that has been certified as such even after the named plaintiff’s personal stake in the outcome of the litigation has been mooted.”).

²⁷ GM also contends that certain named plaintiffs, e.g. Brown, are not typical class representatives for various reasons, such as they never attempted to have the alleged piston slap repaired under their warranty, complained about the engine noise to GM or a GM dealer, or obtained an extended service warranty in response to their complaints. These differences among the classes are insufficient to preclude a finding of commonality or typicality, as they can be resolved through various means, including the use of subclasses.

against interclass conflicts and to insure that the interests of the named plaintiffs are more or less coextensive with those of the class such that the class action will be fully, fairly and vigorously prosecuted”); Sanneman, 191 F.R.D. at 447-48 (typicality requirement satisfied as claims of plaintiff and all members of proposed class stem from plaintiff’s primary contention that Chrysler failed to disclose paint defect that manifested itself after the expiration of express warranties).

Adequacy of Representation

Legal adequacy of representation requires resolution of two questions “(1) do the named plaintiffs and their counsel have any conflicts of interest with other class members and (2) will the named plaintiffs and their counsel prosecute the action vigorously on behalf of the class?” Rutter & Wilbanks Corp. v. Shell Oil Co., 314 F.3d 1180, 1187-88 (10th Cir. 2002) (quoting Hanlon v. Chrysler Corp., 150 F.3d 1011, 1020 (9th Cir. 1998)). GM does not address this factor and the court is unaware of any conflicts the named plaintiffs and their counsel might have with other class members. Amchem, 521 U.S. at 625 (“The adequacy inquiry under Rule 23(a)(4) serves to uncover conflicts of interest between named parties and the class they seek to represent.”). Through their conduct in this litigation, the named plaintiffs and their counsel, whose competency is well-established, have demonstrated their ability and willingness to represent and pursue the class claims vigorously. The court finds the adequacy element of Rule 23(a) has been satisfied.

Rule 23(b) Factors

The plaintiffs seek to certify the class under Rule 23(b)(3), which has two components: predominance and superiority. Amchem, 521 U.S. at 615. “Rule 23(b)(3) includes a nonexhaustive list of factors pertinent to a court’s ‘close look’ at the predominance and superiority criteria: ‘(A) the interest of members of the class in individually controlling the prosecution or defense of separate actions; (B) the extent and nature of any litigation concerning the controversy already commenced by or against members of the class; (C) the desirability or undesirability of concentrating the litigation of the claims in the particular forum; (D) the difficulties likely to be encountered in the management of a class action.’” *Id.* at 615-16 (quoting Rule 23(b)(3)).

Predominance

Satisfaction of the 23(a) commonality requirement does not satisfy the predominance inquiry of Rule 23(b), as the latter is “far more demanding” and tests “whether proposed classes are sufficiently cohesive to warrant adjudication by representation.” Amchem, 521 U.S. at 623-24. “That common questions of law or fact predominate over individualized questions means that the issues in the class action that are subject to generalized proof, and thus applicable to the class as a whole, must predominate over those issues that are subject only to individualized proof.” Rutstein v. Avis Rent-A-Car Systems, Inc., 211 F.3d 1228, 1233 (11th Cir. 2000) (internal quotation omitted). While individual issues can exist, they “must be of lesser overall significance than the common issues, and they must be manageable

in a single class action.” Sanneman, 191 F.R.D. at 449. To determine whether class-wide issues predominate, the court must consider the impact their resolution will have on each class member’s underlying cause of action. Rutstein, 211 F.3d at 1234.

Here, there are several class-wide issues, a primary one being whether piston slap is an engine defect – whether excessive piston to bore clearance can result in engine damage or affect engine performance. However, a determination that piston slap can cause damage does not resolve the liability issue for all plaintiffs, as it does not necessarily mean that piston slap affects all engines the same way or has affected a particular plaintiff’s engine. *See Owner-Operator Indep. Drivers Ass’n, Inc. v. New Prime, Inc.*, 339 F.3d 1001, 1012 (8th Cir. 2003) (Rule 23(b)(3) certification properly denied because, to determine if class member sustained damages as result of statutory violation, court would have to examine each individual class member’s account), *cert. denied*, 541 U.S. 973 (2004); Sanneman, 191 F.R.D. at 449 (individual issues predominated because each class member would have to prove fact and extent of damage).

The court recognizes that a merits determination is not appropriate at the class certification stage, but notes that “the class determination generally involves considerations that are enmeshed in the factual and legal issues comprising the plaintiff’s cause of action ... [and] sometimes it may be necessary for the court to probe behind the pleadings before coming to rest on the certification question.” Falcon, 457 U.S. at 160 (trial judge erred in allowing plaintiff who complained of discrimination in nonpromotion to maintain class

action on behalf of applicants defendant did not hire) (internal quotations omitted). *See e.g. Waste Mgmt. Holdings, Inc. v. Mowbray*, 208 F.3d 288, 298 (1st Cir. 2000) (*Eisen* “does not foreclose consideration of the probable course of the litigation at the class certification stage.”); *see also Shook*, 386 F.3d at 971; *see generally Thiessen v. Gen. Elec. Capital Corp.*, 267 F.3d 1095, 1108 (10th Cir. 2001) (“district court considering a motion to certify [or decertify] is entitled to look past the pleadings and examine the evidence produced during discovery” in age discrimination action brought under class action statute that considers factors similar to those considered under Rule 23, including predominance and trial management concerns). The parties’ submissions and the record before the court reflect the existence in these MDL cases of a dispute that GM likely may be entitled to have resolved individually with respect to each plaintiff—whether their particular vehicle sustained damage as the result of piston slap.²⁸ Neither the Hoekstra protocol nor any other test has been shown to be a reliable predictor of any engine damage, much less specific damage.²⁹ *Compare*

²⁸ For example, GM introduced evidence that several high-mileage vehicles, whose engines made a piston-slap sound (referred to by GM as “cold start tick”), did not show ascertainable damage when torn down, beyond ordinary wear and tear.

²⁹ While establishing injury is not the plaintiffs’ burden at this juncture of the proceedings, the possible individualized nature of the damage assessment is a pertinent Rule 23(b)(3) consideration. *See Waste Mgmt. Holdings, Inc.*, 208 F.3d at 298 (“After all, a district court must formulate some prediction as to how specific issues will play out in order to determine whether common or individual issues predominate in a given case.”). The court recognizes that “[w]here ... common questions predominate regarding liability, then courts generally find the predominance requirement to be satisfied even if individual damages issues remain.” *Smilow v. Southwestern Bell Mobile Systems, Inc.*, 323 F.3d 32, 40 (1st Cir. 2003). However, “[c]ourts have denied class certification where these individual damages issues are especially complex or burdensome.” *Id.* at n.8.

Sanneman, 191 F.R.D. at 441 (individual issues predominated in case based on defendant's alleged fraudulent concealment of a paint defect, when "the need to establish injury and causation with respect to each class member will necessarily require a detailed factual inquiry including physical examination of each vehicle, a mind-boggling concept that is preclusively costly in both time and money") *with* Samuel-Bassett, 212 F.R.D. at 281-82 (in case based on alleged defective brake system court found, "from the evidence amassed thus far," that common questions predominated when there was "more than sufficient indicia that a vast number" of the subject vehicles had experienced both symptoms of brake defects and had had their brake pads and rotors wear-out "before reaching the 5,000 mile mark regardless of who was driving them or where or how they were being driven").

Even if it is shown that piston slap causes some damage to every engine, the problem still remains of establishing the actual extent of each individual plaintiff's loss. While Rule 23(b)(3) class actions commonly involve differing damage awards for different class members, 7AA Charles Alan Wright, Arthur R. Miller & Mary Kay Kane, Federal Practice and Procedure §1784 at 330-31 (3d ed. 2005), the court has not been shown a manageable way of assessing the recovery for each potential class member, as the process may well entail each engine being dismantled. *See Smilow v. Southwestern Bell Mobile Systems, Inc.*, 323 F.3d 32, 40 (1st Cir. 2003) ("Common issues predominate where individual factual determinations can be accomplished using computer records, clerical assistance, and objective criteria--thus rendering unnecessary an evidentiary hearing on each claim.").

Another predominance consideration is the existence of individualized defenses to the plaintiffs' claims, such as whether a plaintiff purchased his or her vehicle after the expiration of the warranty period, whether a plaintiff sought to have his or her vehicle repaired and then, whether it was repaired, or whether, if purchased used, the vehicle's price was discounted because of any audible engine noise on startup. *See generally Waste Mgmt. Holdings, Inc.*, 208 F.3d at 295 (“[W]e regard the law as settled that affirmative defenses should be considered in making class certification decisions.”). Some plaintiffs also will have to establish justifiable reliance to recover under their state consumer protection statutes. *E.g. Colaizzi v. Beck*, ___ A.2d ___, at ___ (Pa. Super. Ct. 2006) (plaintiff must prove all of the elements of common law fraud to establish violation of section of Pennsylvania Unfair Trade Practices and Consumer Protection Law, 73 Pa.C.S. § 201- 2(4)(xxi), providing that “[e]ngaging in any other fraudulent or deceptive conduct which creates a likelihood of confusion or of misunderstanding” constitutes an unfair or deceptive act or practice). *See Sanneman*, 191 F.R.D. at 453 (“Common law fraud claims are frequently not certified, as the relevant individual issues would predominate.”).

If considered alone, the individual issues presented by these defenses and the individualized proof necessary to establish the consumer laws' element of reliance might not predominate over issues common to the class. *See Smilow*, 323 F.3d at 39 (“Courts traditionally have been reluctant to deny class action status under Rule 23(b)(3) simply because affirmative defenses may be available against individual members.”). However,

when considered in conjunction with the damages issue, which likely will require individualized proof not readily available or determinable by reference to some standard, objective criteria, the court finds that individual, rather than common, issues predominate, precluding certification under Rule 23(b)(3). *See Boughton v. Cotter Corp.*, 65 F.3d 823, 826-28 (10th Cir. 1995) (in action based on alleged exposure of persons and property to hazardous emissions of uranium mill, court did not abuse discretion in refusing to certify class under Rule 23(b)(3) based on finding that individual issues, including whether purchasers were aware of contamination and the extent and nature of injuries, predominated); *Smilow*, 323 F.3d at 42 (decertification not warranted on ground damages would have to be determined individually, as actual damages could be calculated by using a computer program); *Harding v. Playtex Family Products Corp.*, 165 F.R.D. 623, 629-31 (D.Kan. 1996) (issues requiring individual adjudication, including causation and damages, predominated in toxic shock syndrome litigation, precluding class certification under Rule 23(b)(3)).

Superiority

Of the four factors specified in Rule 23 that should be considered when determining whether a class action meets the predominance and superiority requirements,³⁰ manageability is the principal concern here. There has been no showing that any potential class members may wish to conduct their suits separately. Rule 23(b)(3)(A). The pendency of other actions

³⁰ Some courts consider these factors as components of the superiority requirement, while others reference them in conjunction with both predominance and superiority. *Eg. Amchem*, 521 U.S. at 615-16; *Mitchell v. Texas Gulf Sulphur Co.*, 446 F.2d 90, 107 (10th Cir. 1971).

is not determinative because, with the exception of the class action pending in Oklahoma state court and two actions that have been remanded, the court is unaware of other pending cases. Under these circumstances, the threat of multiplicity generally does not exist. Rule 23(b)(3)(B). The third factor set forth in Rule 23(b)(3)(C) – the desirability of having the claims litigated in one forum – does weigh slightly in favor of certification, as certifying the classes will prevent the duplication of effort and possible inconsistent results. The parties did not discuss, and the court lacks sufficient information to consider, the other aspect of this factor – whether the particular forum where each case may eventually be sent and tried is an appropriate place to resolve the controversy. *See* Charles Alan Wright, Arthur R. Miller & Mary Kay Kane, Federal Practice and Procedure §1780 at 184-87 (3d ed. 2005).

The pivotal consideration in assessing whether the proposed class actions provide a superior method of adjudicating the piston slap controversy is manageability. “[T]his consideration encompasses the whole range of practical problems that may render the class action format inappropriate for a particular suit.” Eisen, 417 U.S. at 164. Courts have been “hesitant to certify a class where ‘determining ... *membership* in the class would essentially require a mini-hearing on the merits of each case.’” Sanneman, 191 F.R.D. at 455 (quoting Forman v. Data Transfer, 164 F.R.D. 400, 403 (E.D. Pa. 1995)). The plaintiff in Sanneman had offered no realistic proposal for efficiently determining class members. As has been discussed previously, the plaintiffs here have not shown that the Hoekstra protocol is sufficiently reliable to permit the class members to be ascertained. They conceded at the

certification hearing that, in the absence of the Hoekstra protocol, the cases would not be manageable. “[M]erely identifying the anticipated class members would present the court and the parties with an impractical task.” *Id.* Under these circumstances, the court finds that the proposed classes are not manageable.

Significant problems exist, not just with identifying the members of the various classes, but also with ascertaining the existence and extent of any damages the class members may have sustained as a result of piston slap. Assuming the plaintiffs can determine whose vehicles have the alleged defect, they then have to prove, likely on a vehicle by vehicle basis, which ones have been damaged. “[O]n balance, individual issues predominate[] over common issues and ... the advantages of a class action [do not] outweigh[] the potential problems such as case manageability” Boughton, 65 F.3d at 828.³¹ Certifying the classes under these circumstances will not “advance ‘the efficiency and economy of litigation which is a principal purpose of the procedure.’” Falcon, 457 U.S. at 159 (quoting American Pipe & Construction Co. v. Utah, 414 U.S. 538, 553 (1974)).

The court recognizes that, without certification, some plaintiffs may be discouraged from pursuing their claims because their potential recoveries may be limited compared to the possible litigation costs. *See Amchem*, 521 U.S. at 617 (“The policy at the very core of the class action mechanism is to overcome the problem that small recoveries do not provide the

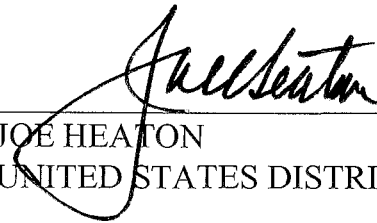
³¹ While the court has not had to distinguish between the proposed state classes and the nationwide class, there are a number of additional grounds for denying certification of a nationwide class, including the variations in state laws. *See Harding*, 165 F.R.D. at 629-30.

incentive for any individual to bring a solo action prosecuting his or her rights.”) (quoting Mace v. Van Ru Credit Corp., 109 F.3d 338, 344 (1997)); Sanneman, 191 F.R.D. at 454 (noting desirability of litigating similar, related claims in one forum, especially in an MDL case in which each class member’s recovery might be insufficient to “render individualized litigation a likely possibility”). That effect may be ameliorated, though, by the availability of attorneys’ fees under the various state consumer statutes. Sanneman, 191 F.R.D. at 456 (“The ability to recover attorneys’ fees or punitive damages belies the projected problems of a negative value suit, and offsets the potential costs associated with individual litigations for relatively small financial amounts.”). ³²

Accordingly, having concluded the plaintiffs have neither demonstrated that it is administratively feasible to identify the members of the proposed classes nor shown that certification is appropriate under Rule 23(b)(3), plaintiffs’ motions for class certification [Doc.Nos. 110, 111, 112, 113, 114, 116, 117] are **DENIED**.

IT IS SO ORDERED.

Dated this 19th day of April, 2006.



 JOE HEATON
 UNITED STATES DISTRICT JUDGE

³² Because resolution of the plaintiff’ claims would require a number of mini-trials, the “purported economies of class treatment” – including the savings of time and money – would be defeated. Sanneman, 191 F.R.D. at 455.